PREVENT, DETECT AND CONTROL CANCER

SUMMARY

Cancer is second only to heart disease as a leading cause of death in New Jersey. Lung cancer, the most frequent cause of cancer death in both men and women in New Jersey, claimed almost 4,700 lives in 1992. And nearly 4,000 more lives were lost to either breast or colorectal cancer (Center for Health Statistics, 1995). Many of these cancer deaths were preventable through changes in lifestyle and early detection and treatment.

Each of us has a one-in-three lifetime probability of getting cancer but on an individual basis the risks can be decreased. Certain associated risks for developing cancer are considered fixed - age, gender and genetic background. They are predetermined and cannot be altered. However, other risk factors are modifiable, such as smoking, alcohol use, sexual activity, dietary fat intake, and toxic occupational exposure. People with multiple risk factors are at even greater likelihood of disease and for them reducing high risk behavior is of paramount importance.

Lung cancer, for example, is associated with cigarette smoking and exposure to asbestos, radon, nickel and chromium. Diets low in vitamin A and passive exposure to cigarette smoke are also risk factors. Clearly, these are modifiable. At present, however, there are no effective means of early detection and treatment of lung cancer and only 13 percent of those diagnosed with the disease survive five years or more.

Increased risk for breast cancer, on the other hand, is more likely to be associated with fixed risk factors such as age (forty or more) and family history of breast cancer (genetics). But, an increased risk of breast cancer has also been associated with the delay of childbirth until after age 33 or from not having children. High dietary fat intake as a modifiable risk factor in the development of breast cancer is currently being studied.

Colorectal cancer is also associated with both fixed and modifiable factors. People most at risk are aged 40 or more, have a genetic inheritance of bowel diseases or have a family history of colorectal cancer. As in the case of breast cancer, high dietary fat and low fiber intake are being evaluated as additional risk factors. Increasing public awareness of dietary factors is probably contributing to the decline in colorectal cancer deaths. The resultant changes in behavior may have contributed to the reduced incidence of colorectal cancer and a decline in deaths.

Primary risk factors for cervical cancer are believed to be behaviorally related. Sexually transmitted disease, sexual activity at an early age, and multiple male sex partners are thought to contribute to the risk of disease. The majority of cervical cancer deaths are probably preventable through screening and monitoring of patients to ensure follow-up for treatment. Unfortunately, it has been reported that errors associated with screening may have contributed to a number of preventable deaths.

A. Reduce breast cancer deaths per 100,000 females (1988 baseline).

	NJ Baseline	NJ 1992	NJ Yr. 2000 Objective	US 1992
Total (Age-adjusted)	25.8	25.4	22.7	21.9
Aged 50-64	83.2	77.9	72.5	N/A
Aged 65 and over	147.2	158.2	130.2	N/A

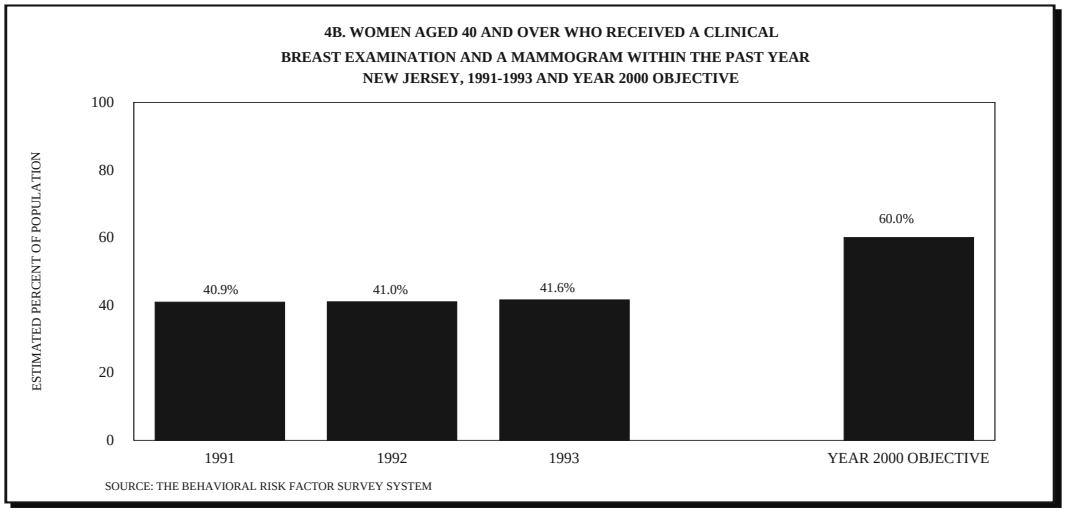
[Figures not available]

In 1992, breast cancer was the leading cause of premature death from cancer in women as measured by YPLL. Since 1985, breast cancer death rates for the total female population have been fairly stable. But, for New Jersey women aged 50 through 64, the rates have declined since 1988. This could be due to an increase in the number of cases detected at earlier stages, in combination with effective treatment. However, the death rates for women aged 65 and older, which had been stable, have increased since 1988. To reach the Year 2000 objective in this age group, continued effort must be directed toward breast cancer screening using clinical breast examination in conjunction with mammography at physician-specified intervals (particularly for elderly women), and access to prompt, effective treatment for all women with breast cancer.

	Likely	Unlikely	Uncertain
Total Age-adjusted			√
Aged 50-64	√		
Aged 65 and over		√	

B. Increase the percentage of women aged 40 and over who received a clinical breast examination and a mammogram within the past year (1991 baseline).

	NJ Baseline	NJ 1993	NJ Yr. 2000 Objective	US



Percent of Women 40 and Over	40.9%	41.6%	60.0%	N/A
95% Confidence Interval		36.9%-46.4%		

According to the Behavioral Risk Factor Surveillance System survey, approximately 41 percent of New Jersey women aged 40 and over received a clinical breast examination and mammogram in 1991. By 1993, this percentage remained basically unchanged. To realize an approximate 50 percent increase by the Year 2000, a number of barriers to accessing quality mammograms, i.e., these which have been federally certified, must be overcome. These are lack of physician referral, cost, and fear.

According to surveys, a frequent reason why women aged 50 and over had not had a mammogram is that their physician did not recommend the test. More efforts must be made to educate physicians on their role in reducing the impact of breast cancer among their patients. Moreover, for many women the cost of a mammogram is still prohibitively high. Though insurance coverage of screening mammograms has been mandated by both federal and state legislation, many women are without health insurance coverage; for them, the cost of a mammogram remains out of reach. Another formidable barrier to overcome is the woman's fear that the mammogram will be positive. Education programs must emphasize that, in the absence of a way to prevent breast cancer, the best defense against this disease is early detection with prompt treatment.

Once these barriers are overcome, it is important that each woman receive a quality mammogram. To address this issue, federal legislation has recently been enacted requiring mammography facilities to be certified by the Food and Drug Administration. This accreditation ensures that the equipment used is of the appropriate low dosage for radiation exposure and that the mammogram image is of sufficient quality.

	Likely	Unlikely	Uncertain
Percent of Women 40 and Over		√	

C. Reduce the deaths due to lung cancer per 100,000 population (1988 baseline).

	NJ Baseline	NJ 1992	NJ Yr. 2000 Objective	US 1992
Total Population (Age-adjusted)	37.7	37.7	41.7 (rev.)	39.3
Minority Males (Age-adjusted)	68.3	64.3	68.9 (rev.)	N/A

[Figure not available]

Since there are currently no effective means of treating lung cancer, it is imperative to focus on prevention strategies. Given the average 20 years between risk factor exposure (mainly through cigarette smoking) and disease, it is important to note that the impact of prevention strategies begun now will generally not be observed by the Year 2000. The strategy behind this objective, therefore, was to slow the increase in death rates attributed to lung cancer and focus on the areas of greatest need for prevention strategies.

Since 1985, lung cancer death rates in the total population have stabilized. Among males, the rates are beginning to decrease. Although the rates are declining for minority males, they are consistently higher than those for white males. The overall decline in rates for men appears to be offset by an increase in the rates for women. In 1988, lung cancer surpassed breast cancer as the leading cause of cancer death among women.

Efforts to reduce lung cancer mortality focus on prevention and nicotine-dependence treatment for cigarette smoking. This is because approximately 85 to 90 percent of lung cancer deaths are caused by smoking.

	Likely	Unlikely	Uncertain
Total	√		
Minority Males	√		

D. Reduce the prevalence of cigarette smoking (1989 baseline).

	NJ Baseline	NJ 1992	NJ Yr. 2000 Objective	US 1992
Aged 20 and over	24.5%	21.9%*	15.0%	27%
High School Students	32.9%	33.0%	20.0%	N/A

*Data for 1992-1993

[Figures not available]

According to the U.S. Census Bureau's Current Population Survey, since 1989 a slight decrease in the percentage of the population aged 20 and over who are current smokers is discernible. Among high school students, however, smoking prevalence appears basically unchanged over the past three years. To reach the Year 2000 objective for this group, aggressive anti-smoking campaigns must be directed to the younger population.

	Likely	Unlikely	Uncertain
Aged 20 and over			√
High School Students		√	

E. Reduce colorectal cancer deaths per 100,000 population (1988 baseline).

	NJ Baseline	NJ 1992	NJ Yr. 2000 Objective	US 1992
Age-Adjusted Total Death Rate	17.1	15.4	13.2 (rev.)	13.2

[Figure not available]

Since 1985 death rates from colorectal cancer have been steadily declining. This decline was so sharp that the Year 2000 objective was revised from an age-adjusted rate of 15.5 to 13.2 per 100,000 standard population. This should promote an even further decrease in the death rates. Several factors have been associated with this decrease:

1. Increased medical surveillance of individuals with a genetic susceptibility for colon cancer;

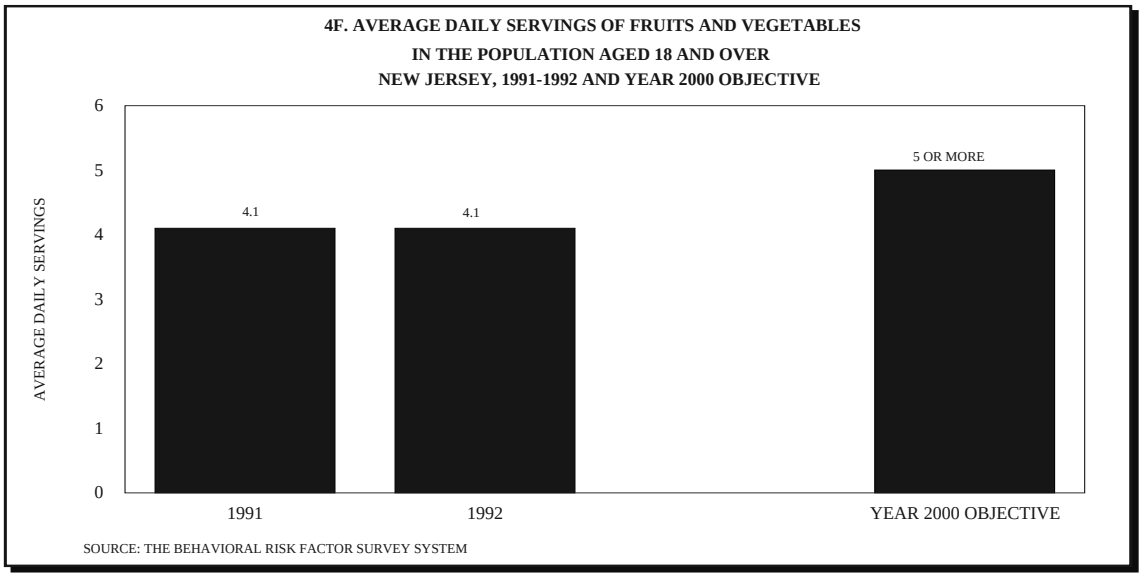
2. Increased numbers of early-stage colorectal cancers detected as the result of screening tests; and

3. The availability of effective colorectal cancer treatments.

	Likely	Unlikely	Uncertain
Age-Adjusted Total Death Rate	√		

F. Increase the average daily servings of fruits and vegetables (including legumes) in the population aged 18 and over (1991 baseline).

	NJ Baseline	NJ 1992	NJ Yr. 2000 Objective	US 1992



Average Daily Servings	4.1	4.1	5.0	4.0

With more and more evidence of the protective effect of fruits and vegetables against certain types of cancers, this objective is viewed as an important means of cancer prevention. However, there was no reported change in consumption patterns between 1991 and 1992. According to the Behavioral Risk Factor Surveillance Systems surveys conducted in 1991 and in 1992, New Jersey's population is estimated to consume, on average, four servings of fruits and vegetables per day. To achieve the year 2000 objective, an additional serving of fruits and vegetables per day is needed.

	Likely	Unlikely	Uncertain
Average Daily Servings		√	

G. Reduce cervical cancer deaths per 100,000 females (1988 baseline).

	NJ Baseline	NJ 1992	NJ Yr. 2000 Objective	US 1992
Total Age-adjusted	2.7	2.5	1.3	2.7
Minority Age-adjusted	5.7	4.3	2.6	N/A
Aged 65 years and over	6.4	9.0	3.2	N/A

[Figures not available]

In the general population, cervical cancer death rates have remained fairly stable and the rates for minority women have remained approximately twice as high as those for the total population. Cervical cancer death rates for women 65 years of age and older remain high relative to the rates for the overall population of women. Although cervical cancer death rates account for a small percentage of the overall cancer death rates, these rates could be greatly reduced by the use of cervical cancer screening combined with prompt treatment of those with positive test results.

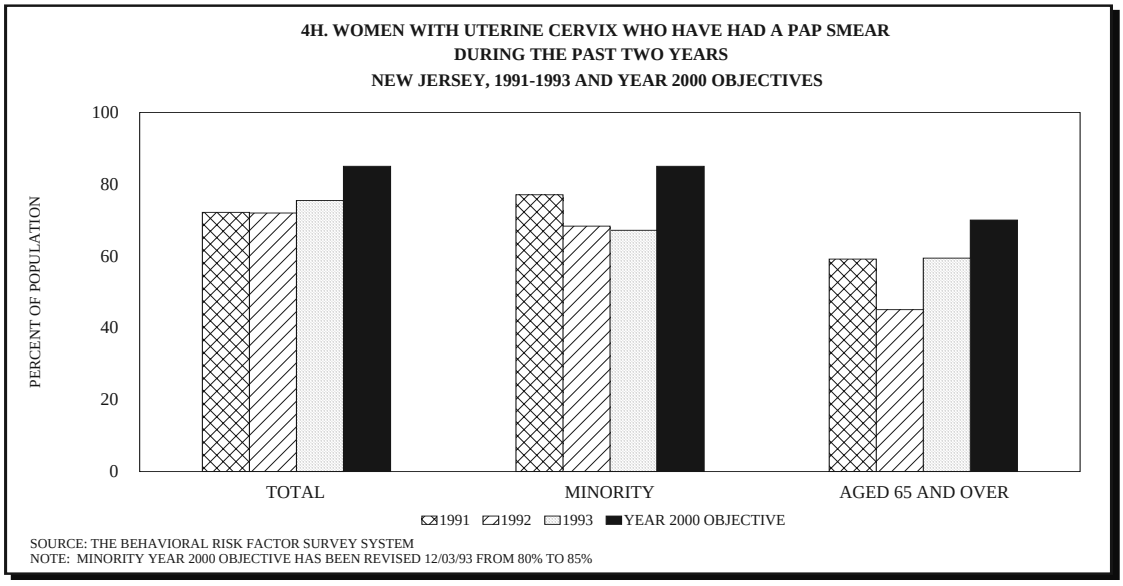
	Likely	Unlikely	Uncertain
Total Age-adjusted		√	
Minority Age-adjusted		√	
Aged 65 Years & over		√	

H. Increase the percentage of women (with uterine cervix) who had a Pap smear in the past two years (1991 baseline).

	NJ Baseline	NJ 1993	NJ Yr. 2000 Objective	US
Total	77.2%	75.5%	85.0%	N/A
Minority	77.1%	67.2%	85.0% (rev.)	N/A
Aged 65 and over	59.2%	59.4%	70.0%	N/A

95% Confidence Interval

Total	71.8%-79.2%



Minority	56.0%-78.4%
Aged 65 and over	49.1%-69.7%

According to the Behavioral Risk Factor Surveillance System survey, in 1991 the percentage of minority women who had a Pap smear in the past two years was similar to that of the total population. By 1993, the percentage of minority women who reported having a Pap smear within two years had declined 10 percent. It is important to note that the group at highest risk for cervical cancer death is also the group least likely to have been screened in the past two years: women aged 65 and older. For this reason, targets for increased awareness of and access to screening programs are women aged 65 and older and all minority women.

	Likely	Unlikely	Uncertain
Total			√
Minority		√	
Aged 65 and over		√	

CURRENT STRATEGIES

- In June 1993, five agencies were funded to develop, implement, and evaluate programs designed to increase participation in routine breast and cervical cancer screening, outreach, education, and follow-up for minority and/or socioeconomically disadvantaged women aged 40 and older.

- The breast and cervical cancer screening program is providing low-cost screening services to a minimum of 875 women in five counties; conducting 30 community-based public education programs on breast/cervical cancer, reaching at least 5,250 high risk women; and conducting 15 professional education programs on breast/cervical cancer reaching at least 750 health care professionals.

- NJDOH was awarded a planning grant from the Centers for Disease Control to develop a comprehensive, statewide effort that expands these initiatives. Provision will be made for establishment of statewide screening programs for breast and cervical cancers; follow-up services for diagnosis and medical treatment for women in need, and a quality assurance mechanism to ensure that both mammograms and Pap tests are accurate. In addition, a statewide breast and cervical cancer control plan will detail a long-term public health approach to reducing the impact of these cancers.

- To increase the rates of mammography among New Jersey women aged 40 and older, NJDOH, in conjunction with the Health Research and Education Trust (HRET), developed a directory of radiology facilities in the state. This directory, available from the HRET, provides information on mammography facilities accredited by the American College of Radiology. The information in the directory, available in English and Spanish, describes services offered, appointment hours and directions to the facilities. Directories are available through local health departments, hospitals, and public libraries.

- Recognizing that lung cancer takes the highest death toll among all cancers and that there are no effective methods of treatment, NJDOH has implemented programs designed to prevent the initiation of tobacco use, encourage smoking cessation among current smokers, and enforce state-specific clean indoor air laws.

- NJDOH administers eight Adolescent Tobacco Use Prevention grants to local health departments in which resistance to influences to use tobacco is stressed. Another state funded grant has been provided to St. Peter's Medical Center in New Brunswick to address tobacco use in drug and alcohol treatment and prevention centers.

- In 1991, New Jersey was one of 17 states selected to participate in the American Stop Smoking Intervention Study (ASSIST) for Cancer Prevention. The primary objective of this collaborative effort between NJDOH, the National Cancer Institute and the American Cancer Society is to reduce adult smoking prevalence. A secondary objective is to reduce smoking initiation among youths. The strategies are: development of smoking control policies, media advocacy campaigns, and promotion of smoking cessation services. These interventions focus on four priority groups: youth, women of childbearing age, blue collar workers, and minorities.

- Special efforts are being made to reach minorities. These include outreach to minority health care providers, and funding to organizations comprised of and/or representing adult black males. These activities provide education and information to promote advocacy for a smokefree environment and promotion of smoking cessation services.

- Currently there are nine clean indoor air laws. The NJDOH's role in implementing these laws is to provide: (1) telephone consultations to the public on the scope and enforcement of the laws, (2) responses to written complaints from the public on the enforcement/lack of enforcement of the laws, and (3) development of policy relevant to these laws.

- The New Jersey State Nutrition Plan has been developed and implemented. This plan was developed as

a cooperative effort between the Division of Family Health Services and the State Nutrition Plan Task Force. Its focus is on four major areas of intervention: the improvement of infant and child health and maternal outcomes; the prevention, detection and control of cancer; the prevention, detection and control of cardiovascular and other vascular diseases; and access to preventive and primary care. This plan provides a status report on the nutrition of various segments of New Jersey's population, and a needs assessment relative to the major areas of intervention and recommendations for reaching year 2000 goals.

- The New Jersey Peer Review organization has undertaken an initiative funded by the U.S. Health Care Financing Administration to increase mammograms among women over 50. This initiative includes presentation of a play addressing the fears of black women toward mammograms.

RECOMMENDATIONS

- Provide better enforcement of laws to reduce access to tobacco products among underage children.
- Provide incentives for smoking cessation through increased availability of smoking cessation programs and cooperative efforts among health providers/insurers.
- Increase insurance coverage for screening mammography and Pap tests.
- Increase funding to defray the costs of breast and cervical cancer screening for low-income and minority women.
- Provide more informational campaigns directed at both consumers and providers on the benefit of routine breast and cervical cancer screening.
- Improve race/ethnicity specific data reporting and collection.

FOR FURTHER INFORMATION

1. U.S. Dept. of Health and Human Services. Preventing tobacco use among young people: a report of the Surgeon General. Washington, D.C.: U.S. Public Health Service, 1994.

2. U.S. Dept. of Health and Human Services. Healthy people 2000: National health promotion and disease prevention objectives. Washington, D.C.: U.S. Public Health Service, 1990.

PREVENT, DETECT AND CONTROL CARDIOVASCULAR AND OTHER VASCULAR DISEASES

SUMMARY

Cardiovascular disease consists of diseases of the heart and blood vessels. It is the leading cause of death for Americans. The main forms of cardiovascular disease (CVD) are coronary heart disease and cerebrovascular disease (stroke). In 1992, these two diseases took the lives of more than 27,000 New Jersey residents. CVD is New Jersey's leading cause of death, and accounts for approximately $3.25 billion in health care costs every year.

Most cardiovascular disease develops over time as the result of the narrowing of blood vessels by fatty deposits. Many factors influence not only whether a person develops CVD, but also how rapidly the disease progresses. Some of the risk factors are fixed; others are modifiable. The fixed risk factors are: age - persons aged 40 and older are at increased risk; gender - CVD is more common among men; and genetic background - persons with a family history of the disease are more susceptible than the general population. Key modifiable risk factors include cigarette smoking, high blood pressure, elevated blood cholesterol, excessive body weight and long-term physical inactivity. Diabetes is also a key risk factor that may be modified to a certain degree.

- Cigarette smoking. Cigarette smokers have a 70 percent higher rate of coronary heart disease than non-smokers. A recent study found that smoking cessation significantly reduces deaths from coronary heart disease and stroke.

- High blood pressure. The risk of stroke for persons with high blood pressure (high blood pressure is defined as 140/90 mm Hg or higher) is approximately seven times greater than for those with normal blood pressure. Those with high blood pressure also have three to four times the risk of developing coronary heart disease.

- Elevated blood cholesterol. Levels of blood cholesterol greater than 200 mg/dl are associated with increased rates of coronary heart disease. Although further study is needed, reducing the mean blood cholesterol level in the population and the number of persons with elevated blood cholesterol are thought to lead to decreased mortality and morbidity from coronary heart disease.

- Excessive body weight. Obesity is associated with high blood pressure, non-insulin-dependent diabetes and elevated blood cholesterol levels. It is also an independent risk factor for coronary heart disease. Obesity in Americans increases with advancing age until about age 50 for men and 70 for women, then declines. This condition is particularly prevalent in minority populations, especially among minority women and among those who live below the federal poverty level.

- Sedentary lifestyle. Physical activity is defined as any bodily movement produced by skeletal muscles that results in caloric expenditure. Studies have shown that a weekly expenditure of 1,000 calories through physical activity can significantly reduce coronary heart disease. "More people are at risk for coronary heart disease due to physical inactivity than for any other single risk factor..." (Healthy People 2000, 1991).

- Diabetes mellitus. Diabetes is a leading cause of death in Americans as well as an important risk factor for coronary artery disease. Diabetes has a significantly higher prevalence among certain ethnic groups including Hispanics, African Americans and Native Americans. Many diabetics may be able to modify this risk factor for cardiovascular disease by controlling their diabetes with diet, exercise and medication.

For more than 10 years, cardiovascular disease death rates have been declining. Early intervention and treatment will contribute to additional reductions in these rates. However, the most far-reaching intervention to reduce the impact of cardiovascular disease now appears to be prevention through the control of the modifiable risk factors.

Progress continues nationally in the reduction of adult use of tobacco products. More and more adults are exercising regularly and eating less fatty diets. A contributing factor to some of the favorable trends among adults may be an increase in the number of workplaces with health promotion programs for their employees. However, the proportion of adults leading sedentary lifestyles has not declined since the baseline year. And there have actually been increases in the proportion of the nation's population that is overweight, from 26 percent in 1990 to 34 percent in 1995.

A. Reduce deaths due to coronary heart disease per 100,000 population (1988 baseline).

	NJ Baseline	NJ 1992	NJ Yr. 2000 Objective	US 1992
Total (Age-adjusted)	144.6	117.3	107.2	114
Minority (Age-adjusted)	142.8	119.4	99.8	N/A
Total Population 45-64	211.0	158.7	154.7	N/A
Minority Population 45-64	232.0	193.0	161.1	N/A

[Figures not available]

Since 1988, the baseline year, death rates from coronary heart disease have continued to decline. Coronary heart disease rates for total and minority populations are both decreasing at about the same rate and are similar, when adjusted for age. But the minority population aged 45 through 64 has higher death rates and is generally at increased risk for coronary heart disease. The focus must continue to be on decreasing coronary heart disease deaths in both populations.

	Likely	Unlikely	Uncertain
Total	√		
Minority			√
Total Population 45-64	√		
Minority Population 45-64	√		

B. Reduce deaths due to cerebrovascular diseases per 100,000 population (1988 baseline).

	NJ Baseline	NJ 1992	NJ Yr. 2000 Objective	US 1992
Total Population (Age-adjusted)	27.3	22.6	20.8	26.2
Minority Population (Age-adjusted)	42.2	34.6	32.0	N/A
Total Population 45-64	33.4	25.7	22.8	N/A
Minority Population 45-64	69.2	49.7	44.9	N/A
Population Aged 65 & over	357.2	324.0	283.8	N/A

[Figures not available]

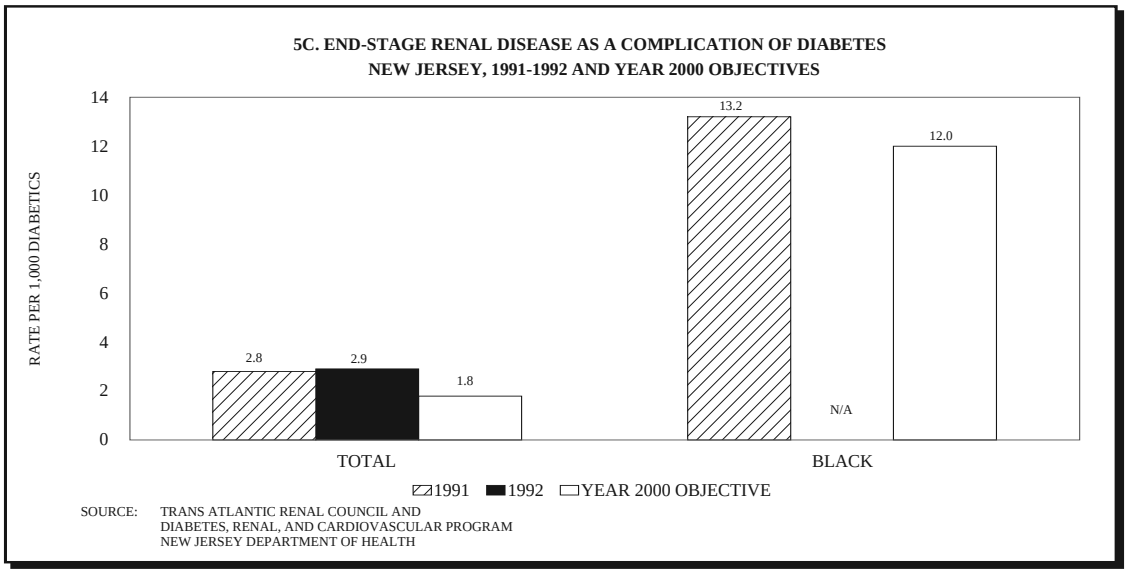
B. Reduce deaths due to cerebrovascular diseases per 100,000 population (1988 baseline). (Continued)

[Figure not available]

Another leading indicator of cardiovascular disease is cerebrovascular disease, or stroke. As with coronary heart disease, deaths from cerebrovascular disease have decreased, but it should be noted that death rates from cerebrovascular disease are almost twice as high in minorities as in the total population. Given the high stroke death rates in the population aged 45 through 64, intensive education and intervention efforts should be directed to this group. Those 65 years and older have a stroke death rate that is approximately 10 times the rate in persons 45 through 64. This group should also receive special education and intervention assistance. Both of these age groups, however, have stroke death rates that have been declining for more than a decade. If current progress continues, the year 2000 objectives appear to be attainable.

	Likely	Unlikely	Uncertain
Total	√		
Minority	√		
Total 45-64	√		
Minority 45-64	√		
Total 65+	√		

C. Reduce end-stage renal disease as a complication of diabetes per 1,000 diabetics over the age of 18 (1991 baseline).



	NJ Baseline	NJ 1992	NJ Yr. 2000 Objective	US
Total	2.8	2.9	1.8	N/A
Black	13.2	N/A	12.0	N/A

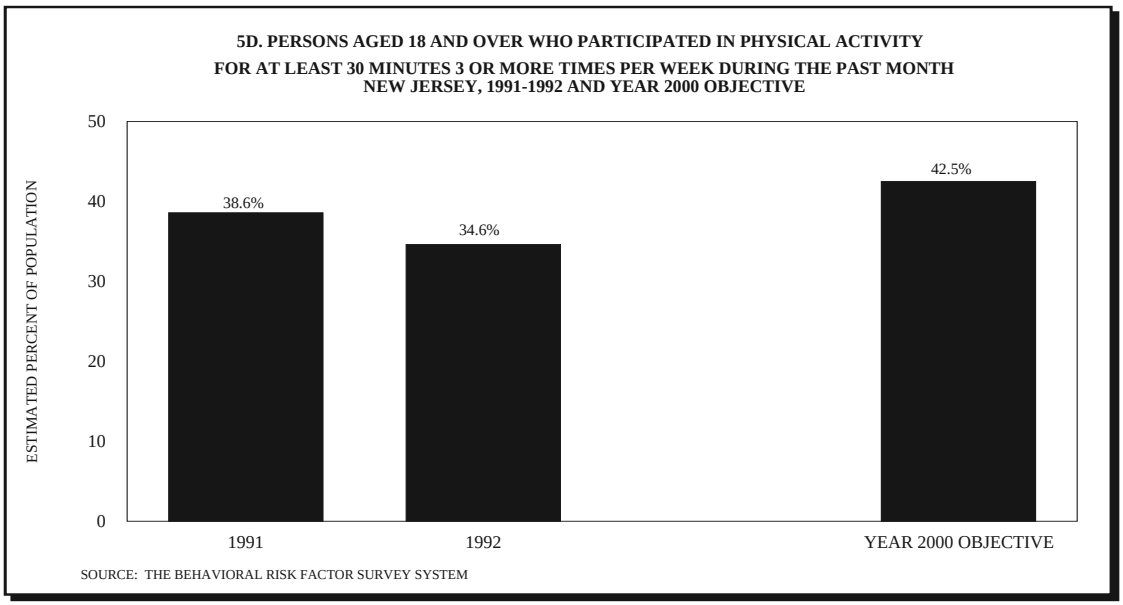
Cardiovascular disease, frequently found in diabetics, is a significant risk factor for end-stage renal disease (ESRD), which may be modified with preventive interventions such as diet or exercise. Although ESRD has other causes, its chief causes are complications from diabetes and/or high blood pressure. Nationally, this disease occurs twice as frequently in black diabetics as in whites. New cases among hypertensives occur about six times more frequently in blacks. New Jersey continues to have one of the nation's highest proportions of patients with end-stage renal disease.

Given the high direct and indirect costs of ESRD, and its irreversibility without renal transplantation, we must focus on the need to prevent ESRD and its devastating effects in diabetics, a highly susceptible population. However, it appears that little progress is being made toward this objective, since 1992 rates of ESRD in diabetics are essentially unchanged from 1991. Due to the small numbers of minority diabetics, there are no reliable 1992 prevalence estimates with which to compare the baseline rate.

	Likely	Unlikely	Uncertain
Total		√	
Black			√

D. Increase the number of persons aged 18 and over who participated in physical activity for at least 30 minutes three or more times per week during the past month (1991 baseline).

	NJ Baseline	NJ 1992	NJ Yr. 2000 Objective	US
Percentage Participation	38.6%	34.6%	42.5%	N/A



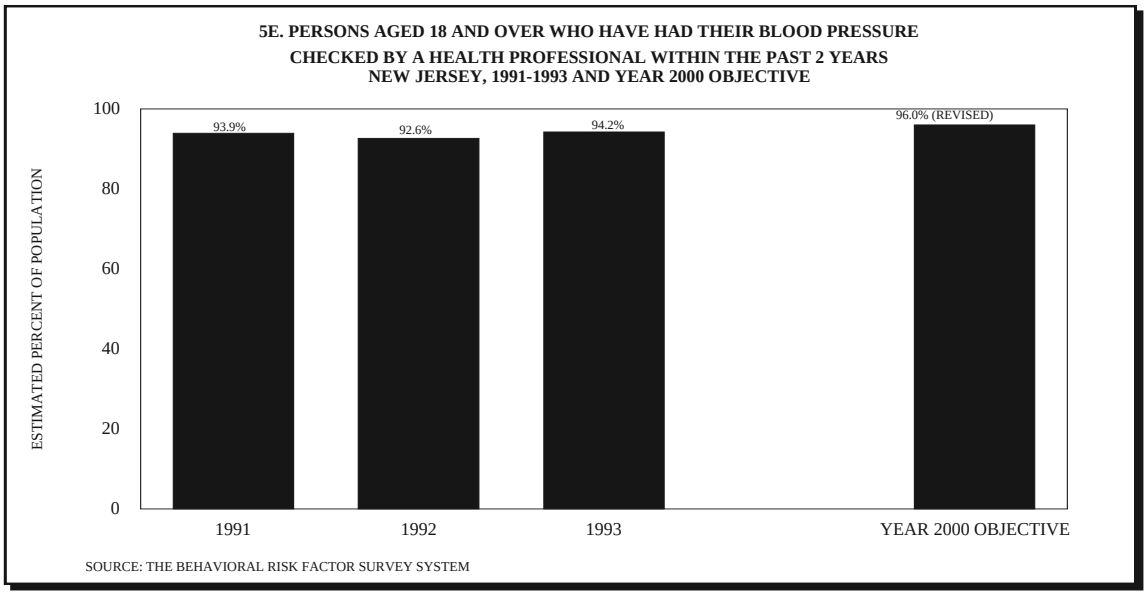
95% Confidence Interval 31.8%-37.4%

According to 1992 Behavioral Risk Factor Surveillance System survey results, 34.6 percent of adult New Jerseyans fulfilled this objective. This percentage is lower than in 1991; renewed efforts to promote the benefits of physical activity are needed to achieve the year 2000 objective. If current trends continue, however, the objective will not be met by the year 2000.

	Likely	Unlikely	Uncertain
Percentage Participation		√	

E. Increase the proportion of persons aged 18 and over who have had their blood pressure checked by a health professional within the past two years (1991 baseline).

	NJ Baseline	NJ 1993	NJ Yr. 2000 Objective		US
Percent Blood Pressure Check	93.9%	94.2%	96.0%	(rev)	N/A



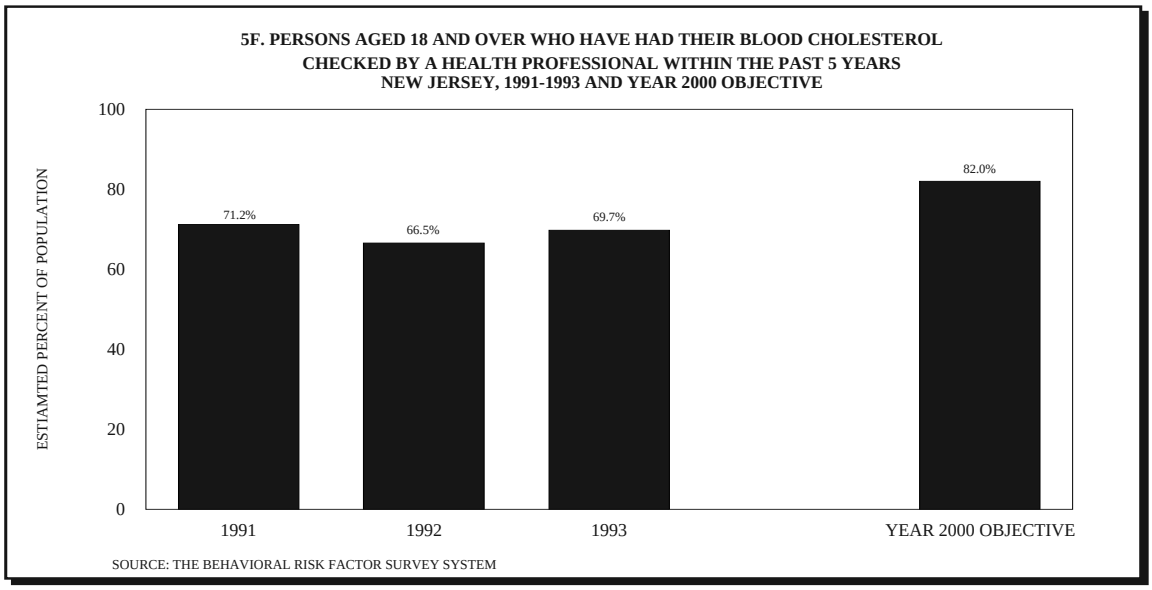
95% Confidence Interval 92.9%-95.5%

The purpose of this objective is to link an increased general awareness of the effects of high blood pressure with the importance of knowing one's own blood pressure. In the absence of baseline data, the Year 2000 objective was set at 90 percent of the adult population. Behavioral Risk Factor Surveillance System survey data available for both 1991 and 1992 indicated that approximately 94 percent of the target group had met this objective, and the year 2000 objective was increased to 96 percent. Given the greater risk for high blood pressure among minority populations, however, it is important to focus culturally appropriate and diverse educational and outreach programs for awareness and control of high blood pressure on minority communities.

	Likely	Unlikely	Uncertain
Percent Blood Pressure Check	√		

F. Increase the proportion of persons aged 18 and over who have had their blood cholesterol checked by a health professional within the past five years (1991 baseline).

	NJ Baseline	NJ 1993	NJ Yr. 2000 Objective	US 1992



Percent Cholesterol Check	71.2%	69.7%	82.0%	60%
95% Confidence Interval		67.1%-72.4%		

According to information from the Behavioral Risk Factor Surveillance System survey, approximately 71 percent of the adult population met this objective in 1991. Moreover, the most current information from the BRFSS indicates that we are not progressing toward this objective. To attain the year 2000 objective, public and professional awareness campaigns on the importance of maintaining normal cholesterol levels need to be increased.

	Likely	Unlikely	Uncertain
Percent Cholesterol Check		√	

CURRENT STRATEGIES

- Four New Jersey State Healthy Heart Program Demonstrations have developed coalitions . They have a combined membership of 139 agencies, including 15 local health departments. These coalitions represent all sectors of the community, and provide cardiovascular health promotion to a population of nearly 656,000 people residing in 41 municipalities. In 1994, the four Healthy Heart Programs submitted 1,000 public service announcements and press releases to the media and implemented a total of 500 individual events, directed toward healthy lifestyle changes in selected communities. At least 30 specific interventions were developed and implemented to help individuals and groups alter their lifestyles to maintain health.

- At least 100 of these Healthy Heart events were held where minority and ethnic populations reside, work, go to school and church, and socialize. Foreign language materials, including culturally sensitive information, were developed. Program staff are bilingual.

- In FY 1994, there were 33 state-funded units for chronic renal dialysis. Their goal is to assist more than 1,100 patients with medications and nutritional supplements.

- In FY 1994, the Trans-Atlantic Renal Council applied for a health service grant to prepare a disaster plan for patients on dialysis, their caregivers, and emergency response personnel.

RECOMMENDATIONS

- Continue to fund the healthy community intervention model and continue to evaluate their efforts.

- Maintain state funds and programs for the renal activity. Reserve a portion of the funds for prevention activities.

- Improve program evaluation and race/ethnicity specific data collection.

- Continue the minority outreach initiative to improve equitable access to cardiac services.

FOR FURTHER INFORMATION

1. U.S. Department of Health and Human Services. National Center for Health Statistics. Current estimates from the National Health Interview Survey, 1992. Washington, D.C.: U.S. Public Health Service. Centers for Disease Control and Prevention, Series 10, No. 189, January 1994.

2. National Heart, Lung, and Blood Institute. Heart memo: The picture of health: A minority perspective. Washington, D.C.: U.S. Public Health Service. National Institutes of Health, March 1991.

3. U.S. Department of Health and Human Services. Healthy people 2000: National health promotion and disease prevention objectives. Washington, D.C.: U.S. Public Health Service, 1990.

4. McGinnis, J.M. & Lee, P.R. Healthy people 2000 at mid decade. Journal of the American Medical Association, 273(14), April, 1995.

PREVENT AND CONTROL AIDS AND HIV INFECTION

SUMMARY

AIDS in New Jersey continues to affect disproportionately injection drug users, blacks, Hispanics, minority women, and men who have sex with men. The fastest-growing mode of transmission of the virus in New Jersey is heterosexual intercourse. And New Jersey has one of the highest seroprevalence rates in the nation for women of childbearing age.

The distinctive epidemiological profile of AIDS in New Jersey has changed little in the last several years. Two-thirds of New Jersey's AIDS cases are black and/or Hispanic. Injection drug use or sexual intercourse with an injection drug user are still the major modes of HIV transmission in this state. Two-thirds of New Jersey's cases are injection drug users, their sexual partners, or their children. Only slightly more than a quarter of cases are men who have had sex with other men, a fact which continues to set New Jersey apart from many other states.

New Jersey is the only high-incidence state which requires reporting newly diagnosed HIV infections with patient identifiers. As of December 31, 1994, the HIV registry recorded a total of 12,207 reported cases. Nearly 38 percent of HIV-infected New Jerseyans are women -- fully 14 percentage points higher than the figure for AIDS cases. New Jersey women are being infected at a considerably faster rate than men.

Through December 31, 1994, New Jersey had experienced just over 24,000 AIDS cases, ranking it fifth among the states. Nearly 16,000 of these individuals have died. Between 30,000 and 50,000 New Jerseyans are thought to be infected with HIV -- approximately one percent of the state's sexually active population.

There is still no vaccine against HIV infection or cure for AIDS, and none is on the horizon. The best weapon against the spread of AIDS, therefore, continues to be prevention and education that informs those at risk, either through sexual transmission or injecting-drug use, that their best defense against infection is enlightened, informed behavior.

A. Decrease the incidence of AIDS per 100,000 population in each category (1990 baseline).

	NJ Baseline	NJ 1992	NJ Yr. 2000 Objective	US
Pediatric Aged 0-9	7.2	4.5	5.3	N/A
White non-Hispanic males 25-44	53.2	68.7	37.0	N/A
Black non-Hispanic males 25-44	498.2	580.9	349.1	N/A
Black non-Hispanic females 15-44	145.3	198.2	98.9	N/A
Hispanic males 25-44	209.4	235.8	145.6	N/A
Hispanic females 15-44	34.0	59.5	19.8	N/A

[Figure not available]

Measuring progress toward attainment of the objectives relating to AIDS incidence and interpreting trends has been complicated by changes in the AIDS surveillance case definition. In 1993 the definition was expanded. In addition, three new conditions diagnosed in HIV-infected adults and adolescents were added: pulmonary tuberculosis, recurrent pneumonia, and invasive cervical cancer.

The AIDS incidence rate in black and Hispanic females of child-bearing age (15 through 44) increased at a faster rate than the rate in males 25 through 44 between 1988 and 1992. The rate in white males aged 25 through 44 also increased rapidly over the period. It appears unlikely that the year 2000 objectives for any of these groups, other than children under 10, will be met. It should be noted that changes in the HIV infection rates through the decade may not effect the AIDS incidence rate before the year 2000, because of the long incubation period.

The one positive finding is the pediatric incidence rate, which has not increased since the baseline measurement. This trend may be due to the use of AZT in pregnant HIV-positive women, which has been found to substantially decrease the transmission of the virus to newborns.

	Likely	Unlikely	Uncertain
Pediatric 0-9	√		
White non-Hispanic males aged 25-44		√	
Black non-Hispanic males aged 25-44		√	
Black non-Hispanic females aged 15-44		√	
Hispanic males aged 25-44		√	
Hispanic females aged 15-44		√	

B. Decrease total age-adjusted death rates in those 25 through 44 due to HIV infection per 100,000 population (1988 baseline).

	NJ Baseline	NJ 1992	NJ Yr. 2000 Objective	US 1992
Total (Age-adjusted)	14.9	24.4	12.1	12.6
Total Aged 25-44	36.7	60.0	30.1	N/A

[Figures not available]

The chief difficulty in setting objectives for AIDS is the long incubation period from HIV infection to AIDS. It is currently estimated to range from two years to several decades, with a median of about eight to 10 years. Most people who will be diagnosed and reported with AIDS by the year 2000 are already infected. Therefore the success of current efforts to prevent the transmission of HIV cannot be measured using AIDS cases reported in the 1990s. Similarly, the mortality rates indicated above were caused by people infected in the 1980s, for the most part. In order for the year 2000 objectives to be achieved, more effective clinical and medical treatments which prolong life are needed.

	Likely	Unlikely	Uncertain
Total		√	
Population Aged 25-44		√	

C. Decrease the percentage of HIV-positive readings in mothers of newborns (1988 baseline).

	NJ Baseline	NJ 1994	NJ Yr. 2000 Objective	US
Percent HIV Positive Mothers	0.49%	0.35%	0.30%	N/A

[Figure not available]

This objective is attainable if current trends continue. There is a decreasing trend of HIV-positive mothers. High-risk women of childbearing age are strongly advised to be tested early for HIV by physicians, community clinics and educational programs because of new therapies to prevent the transmission of HIV from an infected mother to her newborn. These data may not be available in the future.

	Likely	Unlikely	Uncertain
Percent HIV Positive Mothers	√		

CURRENT STRATEGIES

- New Jersey has pioneered in educational programs and has been nationally recognized for its School Based Youth Services Program (SBYSP). This program is a collaborative partnership between the New Jersey Department of Human Services, local school boards and the communities they serve. The program provides health and social services to students in schools using a one-stop shopping approach.

- At the Center for Disease Control and Prevention's request, and in order to involve the communities most affected by the AIDS/HIV epidemic, an HIV Prevention Community Planning Group (HPCPG) was formed. The goal of the HPCPG was - and remains - to develop an annual HIV prevention plan for New Jersey that identifies priority populations to be targeted for prevention programming and that recommends interventions and strategies most suitable for the populations identified. These recommendations called for more precise targeting of prevention measures to New Jerseyans at highest risk of infection.

- Considerable progress has been made in therapies for HIV/AIDS. AZT and other drugs are being administered at early intervention sites and elsewhere.

- Findings from the AIDS Clinical Trials Group Protocol 076 on the use of Zidovudine (AZT) in HIV-infected pregnant women were released. This carefully controlled study determined that perinatal transmission of HIV was reduced by approximately two-thirds when the drug was administered to a select group of pregnant women and their infants after birth. In July 1994, the Department of Health notified the medical community and stressed the urgency of the recommendation that women who are pregnant or contemplating pregnancy should receive HIV counseling and be tested for HIV infection. This recommendation was also contained in legislation enacted in July, 1995.

- The Governor's AIDS Advisory Council has been appointed and is offering strategies and recommendations to prevent and control AIDS and HIV infection in New Jersey.

RECOMMENDATIONS

- In order to control the AIDS epidemic, New Jersey needs to continue targeting high-risk groups (injection drug users, blacks, Hispanics, minority women, and men who have sex with men) with risk-modification information.

- Community involvement and planning must be strengthened, as this is the best resource to deliver services to these targeted populations.

- Continue to expand prevention and treatment services delivery in local communities.

- Educational campaigns should continue to be revised and expanded to reach individuals with high-risk behaviors.

- Access to counseling and testing sites must be increased to provide timely and accurate information to the target groups.

- Maintain seroprevalance testing of mothers of newborns.

- Continue to monitor service delivery programs to assess process and outcome evaluation variables.

FOR FURTHER INFORMATION

1. Center for Disease Control. Revised classification system for HIV infection and expanded surveillance case definition for AIDS among adolescents and adults. MMWR 41 (RR-17), 1992.

2. Center for Disease Control. Projection of the number of persons diagnosed with AIDS and the number of immunosuppressed HIV-infected persons - United States, 1992-1994. MMWR, 41 (RR-18), 1992.

3. Center for Disease Control. Current trends update: Trends in AIDS diagnosis and reporting under the expanded surveillance definition for adolescents and adults - United States, 1993. MMWR, 43 (45), 1994.

PREVENT AND CONTROL SEXUALLY TRANSMITTED DISEASES

SUMMARY

Sexually transmitted diseases (STDs) continue to be a major health problem in New Jersey. Although there has been an overall decline in STDs in the last few years, it should be noted that statewide averages mask extremely high case rates in many of New Jersey's urban areas. The problem is especially acute among the young, and among blacks and Hispanics in the inner cities. Although they were the focus of this chapter's year 2000 objectives, syphilis, gonorrhea and chlamydia represent only a portion of all STDs. More than 20 other organisms and syndromes are transferred through sexual contact, including genital herpes, HIV and hepatitis B.

Syphilis

Primary and secondary syphilis increased substantially from 1986 to 1990, coinciding with an increase in crack cocaine usage. The more recent decrease may be due in part to sexual behavior changes in response to the HIV epidemic. Evidence increasingly confirms an association between genital ulcer disease including infectious syphilis and sexual HIV spread. HIV prevention and syphilis control activities build upon and support each other. The incidence of syphilis is highest in those aged 20 through 24.

The sharp increase in the reported incidence of congenital syphilis in 1989 and 1990 was a direct outcome of changes in the Center for Disease Control and Prevention's (CDC) guidelines for classifying and reporting cases of congenital syphilis. The new definition includes stillbirths and all infants whose mothers have untreated, or inadequately treated, syphilis at delivery. Thus, an increase in reported cases of congenital syphilis was anticipated. Nevertheless, even accounting for this change in definition, the reported rates of incidence for congenital syphilis are trending upward.

Gonorrhea

The incidence rate for gonorrhea, highest among those aged 15 through 19, has declined for more than a decade. The number of cases is one-third as many as it was 10 years ago. The 1992 rate, 89.0 per 100,000 population, is less than the year 2000 objective of 100 per 100,000 population, allowing for establishing a new target. Gonorrhea is the most frequently reported communicable disease in the U.S., and is the key indicator of progress in reducing STDs among populations with the highest disease rates.

Chlamydia

According to Healthy People 2000, chlamydia is the most common sexually transmitted bacterial pathogen in the United States, causing an estimated four million acute infections each year. In New Jersey, chlamydia is thought to be two to three times more common than gonorrhea. Chlamydia testing in New Jersey is provided by the state.

Uncomplicated chlamydia infection may exhibit no symptoms or signs of infection. Left untreated, however, chlamydia infection can cause serious complications. Because chlamydia is most prevalent in women and children, the screening of sexually active women is recommended by the U.S. Preventive Health Services Guidelines (Appendix B) as a routine for primary care.

Due to changes in reporting, the most recent STD incidence rates for New Jersey's minorities are unavailable. This is unfortunate, since minority rates tend to be substantially higher than the rate in the population as a whole. However, the Department of Health is working to resolve this reporting problem. The rates of incidence for minorities are so much higher than the total population that separate year 2000 objectives had to be set.

A. Reduce primary and secondary syphilis incidence per 100,000 population (1988 baseline).

	NJ Baseline	NJ 1992	NJ Yr. 2000 Objective	US 1992
Total	14.2	7.7	10.0	13.3
Minority	72.3	109.9*	65.0	N/A

*1990 data

[Figure not available]

There was a major rise in the reported incidence of primary and secondary syphilis in New Jersey between 1988 and 1990. However, the rate for the total population subsequently decreased to 7.7 cases per 100,000 in 1992 which is below the year 2000 objective. This rate compares favorably to the national rate of 13.3 cases per 100,000 population. Despite the decreased total rate, however, there remains a significant syphilis problem in New Jersey. Forty-four cities exceeded the year 2000 goal in 1992.

Data for minorities beyond 1990 are not available because racial and ethnic categories have been combined. However, the rate of increase for minorities from 1988 to 1990 was considerably higher than for the total population. Nationally, the incidence rate for blacks is also substantially higher than that for the total population.

	Likely	Unlikely	Uncertain
Total	√		
Minority			√

B. Reduce congenital syphilis incidence per 100,000 live births (1988 baseline).

	NJ Baseline	NJ 1992	NJ Yr. 2000 Objective	US 1992
Total	63.5	91.3	30.0	94.7
Minority	19.3	248.4*	100.0	N/A

*1990 data

[Figure not available]

The sharp increase in the reported incidence of congenital syphilis from 1989 to 1990 is due, at least in part, to CDC's changes in the guidelines for classifying and reporting cases of the disease. However, even after taking into account the effect of the changes in the guidelines, incidence has risen over the past few years. More recent data for minorities are not available at this time.

	Likely	Unlikely	Uncertain
Total		√	
Minority			√

C. Reduce gonorrhea incidence per 100,000 population (1988 baseline).

	NJ Baseline	NJ 1992	NJ Yr. 2000 Objective	US 1992
Gonorrhea Incidence Rate	212.9	89.0	100.0 (rev.)	196.7

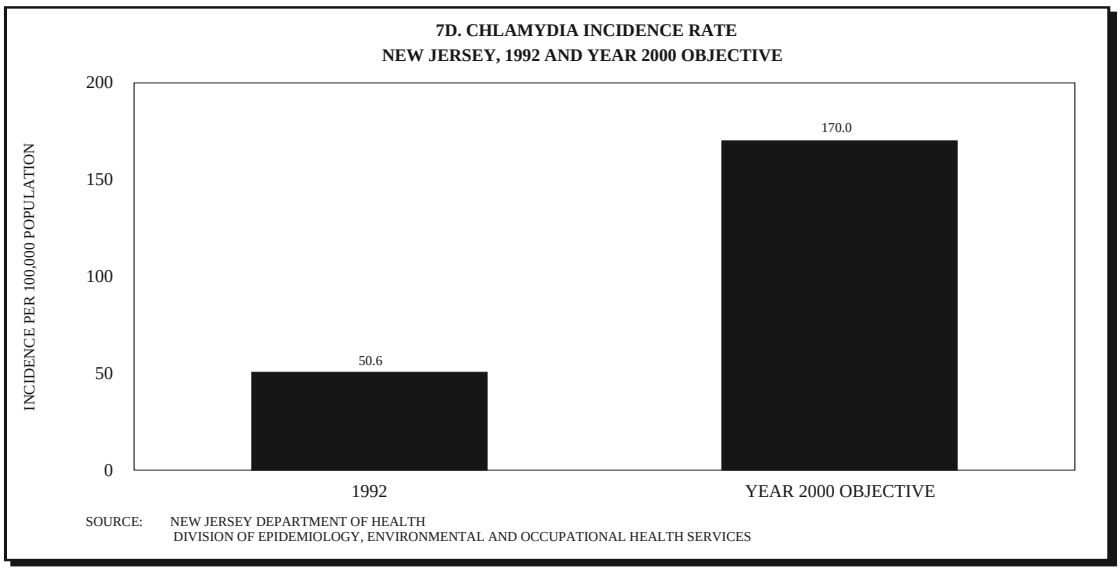
[Figure not available]

The reported incidence of gonorrhea in New Jersey declined by 58.2 percent between 1988 and 1992. As a matter of fact, this decline has continued for more than a decade. The number of cases of gonorrhea is one-third as many as it was 10 years ago. Gonorrhea incidence in the country as a whole has been declining also, but the decrease is at a lower rate than in New Jersey. A 34.3 percent decline was reported for the nation from 1989 to 1992. New Jersey had met and exceeded both the original and revised objectives for incidence of gonorrhea by 1992.

	Likely	Unlikely	Uncertain
Gonorrhea Incidence Rate	√		

D. Reduce chlamydia trachomatis incidence per 100,000 population (1988 baseline).

	NJ Baseline	NJ 1992	NJ Yr. 2000 Objective	US



Chlamydia Incidence Rate	N/A	50.6	170.0	N/A

The statewide incidence rate for chlamydia in 1992 was 50.6 cases per 100,000 population. Although reporting has improved since 1990, when the reporting law took effect, reported incidence is greatly understated. Chlamydia incidence is thought to be two to three times more common than gonorrhea. Further, chlamydia testing is provided by the state, but it is difficult to determine how much testing is occurring. Because there is no specific population-based Healthy People 2000 objective for chlamydia incidence, the national objective of 170.0 cases per 100,000 population for non-gonococcal urethritis was used as the year 2000 target.

	Likely	Unlikely	Uncertain
Chlamydia Incidence Rate			√

CURRENT STRATEGIES

- The message: "Protect Yourself, Know the Signs, Seek Medical Help, and Spread the Word" was delivered to high-risk populations statewide, in order to reduce infection rates; manage a high percentage of primary, secondary and latent syphilis cases; and locate, examine and counsel infected persons. This message is spread through STD clinics, local health departments and school-based educational programs.

- Field staff offices with disease intervention specialists were located within local STD clinics in New Jersey's major urban areas.

- The Newark center participated in a federally-funded study to increase the efficacy of HIV counseling and testing with an enhanced counseling model.

- A study is being conducted to document the prevalence of chlamydia infection and to identify criteria for selective screening, in preparation for the development of a statewide screening program.

RECOMMENDATIONS

- There should be a continued emphasis on preventive measures such as selectivity of partners, condom use and other risk-reduction practices.

- STD services should continue to be provided at all points of entry in the health care system, including clinics, hospitals and private physicians' offices.

- Culturally appropriate educational and outreach activities targeted to youth should be improved.

- Reinstitute race/ethnicity specific data reporting and collection, by service provider level.

FOR FURTHER INFORMATION

1. Center for Disease Control (Askew, G., Finelli, L., Nakashima, A.). Evaluation of a congenital syphilis surveillance system - New Jersey. MMWR, 44 (11), 1995.

2. Gorwitz, R.A., Webster, L.A., Nakashima, A.K., & Greenspan Jr. Sexually Transmitted Diseases. In: Wilcox, L.S. Marx, J.S. ed. From data to action: CDCs Public Health Surveillance for Women and Children (monograph). U.S. Department of Health and Human Services. U.S. Public Health Service. Atlanta: Center for Disease Control and Prevention, January 1995.

3. Hillis, S., Black, C., Newhall, W., Walsh, C., & Groseclose, S. New opportunities for chlamydia prevention: Applications of science to public health practice. Sexually Transmitted Diseases, 22, 1995.

PREVENT AND CONTROL VACCINE-PREVENTABLE AND OTHER INFECTIOUS DISEASES

SUMMARY

Although it requires major effort, it is possible for areas to rid themselves of the scourge of many infectious diseases. Such a success is the Pan American Health Organization's efforts toward eliminating polio in the Americas by 1995. Success, defined as no new confirmed cases of paralytic poliomyelitis detected over a three-year period, has been accomplished. Certification of the interruption of wild polio virus in the Americas occurred on September 29, 1994. While continued surveillance and immunization activities are needed until the disease is conquered worldwide, the Americas are now polio-free.

New Jersey remains vulnerable to epidemics of infectious disease and this vulnerability has particularly negative implications for the young. For the period 1986 through 1993, New Jersey ranked fifth in the nation in the overall cumulative measles incidence rate per 100,000 population. Improving initial immunization levels among unvaccinated preschool children, the most vulnerable and problematic population in New Jersey for this disease, and increasing revaccination efforts are vital in limiting the severity and frequency of future measles epidemics and in driving the trend in the incidence of measles downward.

In New Jersey, a number of cooperative efforts of public programs and agencies have been launched to screen preschool children for their immunization status, directly immunize or refer for immunization as needed, and track the ongoing immunization status of the children least likely to be protected. Additional federal, state and private resources have been directed toward these efforts. Also, the increased enrollment of individuals and families in managed care health benefit plans, many of which emphasize preventive services, should positively influence the immunization status of these enrollees.

There has been a resurgence of tuberculosis (TB) in the United States during the past decade. The lowest number of cases reported for the nation since reporting began in 1953 occurred in 1985. During the period 1985 through 1993, there was an excess of approximately 64,000 reported cases, compared with the number predicted based on the declining trend from 1982 through 1984. A major new concern is the emergence of multidrug-resistant strains of TB. New Jersey has experienced the same increasing trend in tuberculosis incidence since 1985. Minorities have been particularly hard hit.

There is an active research program in which the biology, ecology and behavior of the vector tick population responsible for transmitting Lyme disease is being assessed. A comprehensive summary of the published research has been compiled in an Extension Bulletin entitled Lyme Disease: Assessment and Management of Vector Tick Population in New Jersey to facilitate the development of site-specific management strategies. Work is being done with affected communities to disseminate this information. Despite this dissemination of information, however, the incidence of Lyme disease has increased sharply since 1992.

A. Decrease the annual incidence of measles (rubeola) to zero by the year 2000 (1988 baseline).

	NJ Baseline	NJ 1994	NJ Yr. 2000 Objective	US 1992
Annual Measles Incidence	405	175	0	2,237

[Figure not available]

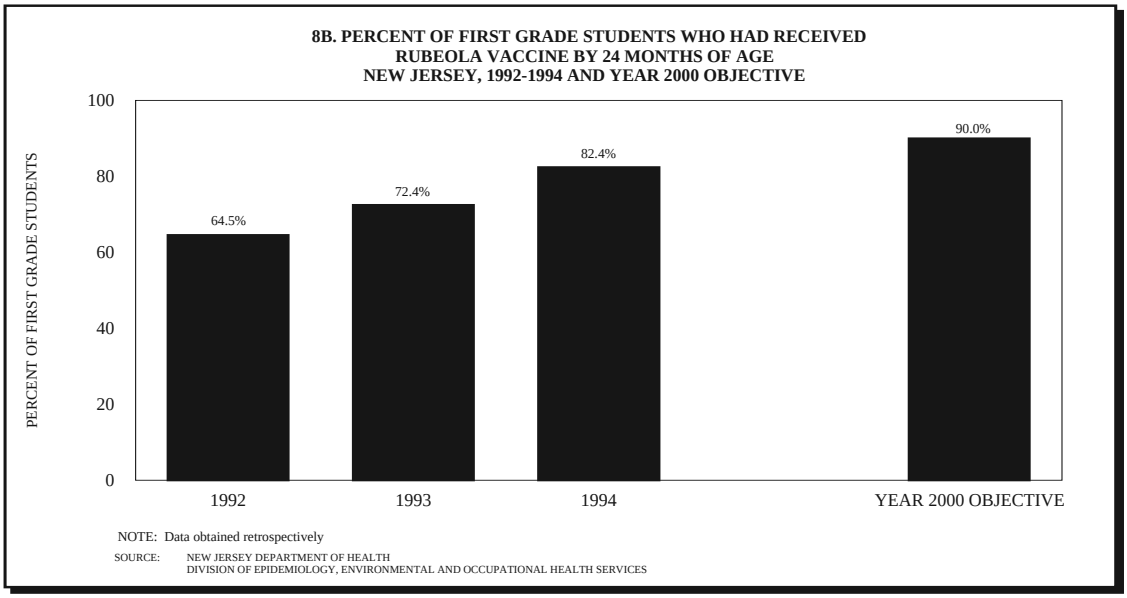
The incidence of measles (rubeola) exhibited a 97 percent decline between 1988 and 1993, despite a significant rise in measles cases in 1991 caused by a regional measles epidemic. Although vast improvement is seen, the sharp rise in 1991 and another rising trend in 1994 indicate the vulnerability of New Jersey's population to this disease. However, with extensive active surveillance and rigorous immunization efforts, it is possible to reach the objective of being measles-free by the year 2000.

Improving initial immunization levels among unvaccinated preschool children, the most vulnerable and problematic population in New Jersey for this disease, and increasing revaccination efforts are key to limiting the severity and frequency of future measles epidemics and to driving the trend in measles incidence downward.

	Likely	Unlikely	Uncertain
Annual Measles Incidence			√

B. Increase immunization levels for measles (rubeola) in children by age two (1992 baseline).

	NJ Baseline	NJ 1994	NJ Yr. 2000 Objective	US



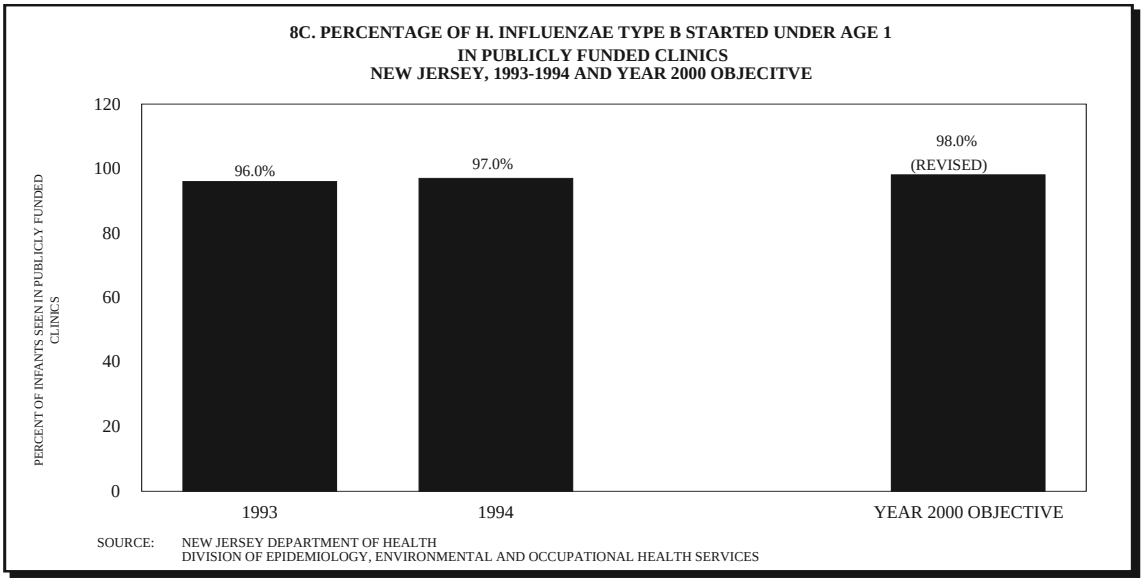
Percent of First Grade Students	64.5%	82.4%	90.0%	N/A

Based on the Retrospective School Immunization Survey, immunization levels for measles (rubeola) in children by age two increased from 64.5 percent in 1992 to 82.4 percent in 1994. Information gathered retrospectively on six year olds between 1992 and 1994 reflects the immunization status of two-year old children in 1988 through 1990. The first year these data were available was 1992. With improved immunization efforts and data tracking systems, reaching the objective of 90 percent coverage of children by age two can be achieved by the year 2000.

	Likely	Unlikely	Uncertain
Percent of First Grade Students	√		

C. Increase immunization levels for H. influenzae type b started under age one in publicly-funded clinics (Revised) (1993 baseline).

	NJ Baseline	NJ 1994	NJ Yr. 2000 Objective	US



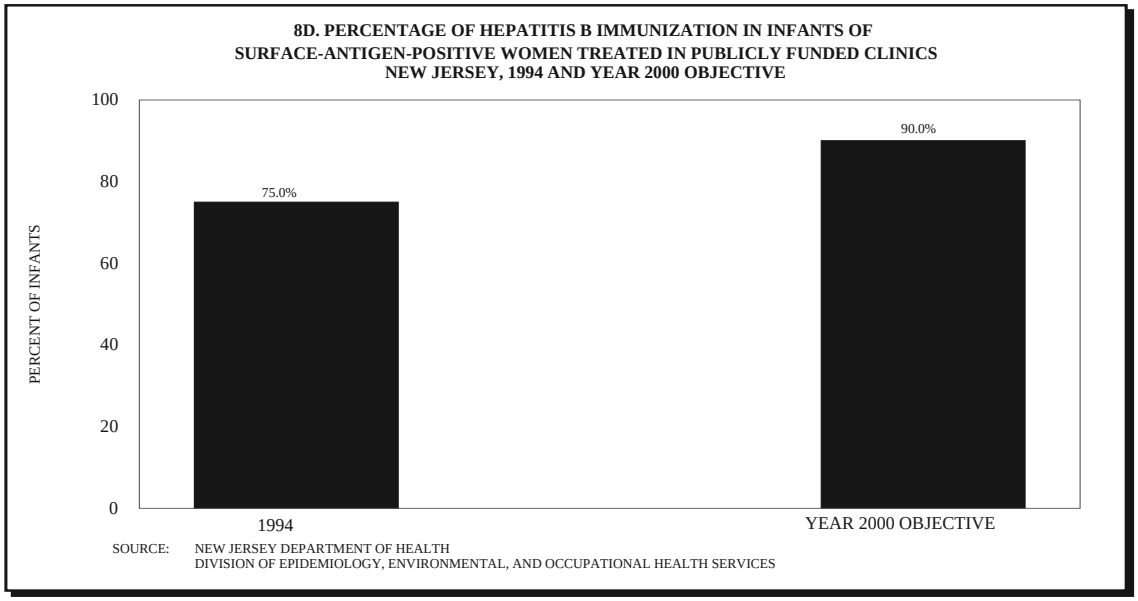
Percent of Infants	96.0%	97.0%	98.0% (rev)	N/A

Because it was not possible to account for vaccinations given in the private sector, this objective was revised to cover infants under one year old for whom data are now collected in publicly-funded clinics. The 1993 baseline measure for this group of infants was 96.0 percent. With improved immunization efforts and data tracking systems, it is possible to reach this objective by the year 2000.

	Likely	Unlikely	Uncertain
Percent of Infants	√		

D. Increase immunization levels for Hepatitis-B in infants of surface-antigen-positive women treated in publicly-funded clinics by the year 2000.

	NJ Baseline	NJ 1994	NJ Yr. 2000 Objective	US



Percent of Infants	N/A	75.0%	90.0% (rev)	N/A

By 1994, a statewide public sector perinatal Hepatitis-B prevention program had been implemented in 20 of 21 counties. All pregnant women receiving care in these agencies are being screened for Hepatitis-B and, if affected, tracked throughout the perinatal period. By 1994, more than 100 surface-antigen-positive pregnant women had been identified and were being tracked until delivery. After delivery, their infants were followed. This program is an effective mechanism for meeting this objective by the year 2000. Active maintenance of this program will assure that this objective is met.

	Likely	Unlikely	Uncertain
Percent of Infants			√

E. Decrease the annual incidence of active TB per 100,000 population (1988 baseline).

	NJ Baseline	NJ 1994	NJ Yr. 2000 Objective	US 1992
Total	10.3	11.0	4.4	10.5
Minority	35.5	42.6*	13.5	N/A

*1992 Data

[Figure not available]

The incidence rate of active TB among minorities in New Jersey increased steadily between 1988 and 1992, and was more than three times the rate for the total population during that period. The rate for the total population began a decline in 1992 and may reach the year 2000 target. While there has been an overall increase in TB cases nationally, the rate increase for New Jersey has been almost twice that of the nation. To reach the year 2000 goal for minorities, major initiatives will be required for supervising and managing TB patients. TB control efforts have received increased state and federal resources, including funds for a model TB prevention, control, and research center to address this serious, re-emerging problem.

	Likely	Unlikely	Uncertain
Total			√
Minority			√

F. Decrease the annual incidence of Lyme Disease (with rash) by the year 2000 (1988 baseline).

	NJ Baseline	NJ 1994	NJ Yr. 2000 Objective	US
Annual Lyme Disease Incidence	550	1,306	275	N/A

[Figure not available]

Between 1988 and 1994, the incidence of Lyme disease (with rash) has increased in New Jersey from 550 to 1,306 cases. To reach the year 2000 goal, necessary strategies include prevention through tick control programs, and personal protection. The need for education to allow early detection and appropriate treatment is also important.

As with other infectious diseases, the incidence of Lyme disease has fluctuated. For all years since the baseline (1988), the incidence of Lyme disease in New Jersey has exceeded the number of baseline cases (550). Without the resources to deal with this problem more aggressively, it is doubtful that the year 2000 objective will be reached.

	Likely	Unlikely	Uncertain
Annual Lyme Disease Incidence		√	

CURRENT STRATEGIES

Measles and Immunizations

- Immunization programs have been implemented by NJDOH, Division of Epidemiology, Environmental, and Occupational Health Services, working with the Division of Family Health Services, WIC Program, and the Department of Human Services, Aid to Families with Dependent Children (AFDC) Program, at WIC, AFDC, and co-located WIC/AFDC sites that provide on-site screening, immunizing/referral, and tracking of immunization status of preschool children.

- There are WIC/Immunization sites operating in Elizabeth and Camden. In 1993, over 3,951 children received 8,371 doses of vaccine at these sites. By January 1995, immunization screening was implemented in all WIC agencies. In 1993, AFDC/Immunization clinic sites operating in Jersey City, Camden, Atlantic City and Trenton served over 11,048 children who received 22,042 doses of vaccine. In 1994, AFDC/Immunization sites became operational in Paterson and New Brunswick and another site opened in Elizabeth in December, 1994.

- To support tracking, federal and private funds have been received and cooperative agreements have been forged to facilitate development of a statewide system that will also have linkages with WIC, AFDC, and birth records. When fully implemented, the new statewide tracking system will facilitate monitoring of the immunization status of all children in the state using birth and immunization records. The WIC Tots Registry of Immunizations (TRI) developed in the DEEOHS was expanded to be compatible with the WIC certification process and upgraded. This tracking system (now called TRIagain Plus) has been tested successfully at several of the WIC and AFDC immunization sites. Designed for monitoring the immunization status of preschool-aged WIC clients, the TRIagain Plus tracking system will be implemented in WIC agencies statewide.

- The public sector perinatal Hepatitis-B prevention program, enabling tracking of Hepatitis-B surface-antigen-positive women during their pregnancies through the birth of their children, will be continued to assure appropriate treatment with the three-dose series. Again, immunization tracking of the infants of these mothers is a major aspect of this initiative.

Tuberculosis

- A TB education and training program for health care workers and others; policies for TB control in correctional facilities; TB surveillance programs to detect infection among contacts; and directly observed therapy and management programs on a limited basis have all been developed and implemented.

- NJDOH has received a $6.6 million grant ($2.2 million annually for three years), to operate the New Jersey Medical School National TB Center. The Center will serve as a workshop in which experts can develop models for supervising and managing TB cases, train health care professionals, and provide direct care and supportive services to TB patients that includes substance abuse and HIV/AIDS treatment as needed. The model TB prevention and control center is now responsible for state-of-the-art diagnostic and treatment services, research, directly observed therapy, training and educational programs, and a national TB information line.

- The development of an appropriate policy to assure identification (case-finding) and the ability to individualize treatment plans to assure compliance with treatment regimens is underway. Such statements have been published for review and comment in the New Jersey Register.

Lyme Disease

- Active research to identify the most cost-effective strategies for dealing with the vector tick population that carries this disease, and working with affected communities to assist them with designing specific management strategies, will be continued. Education on the clinical aspects, epidemiology, and economic impact of Lyme disease, the biology and ecology of the vector tick populations, management strategies and associated costs, associated legal issues, etc. will be provided with existing resources.

RECOMMENDATIONS

Infectious Disease

- As a component of the research program, operational research to evaluate the most cost-effective and cost-efficient intervention strategies for controlling TB should be conducted. A total management information system for TB, with access by the provider of care, also needs to be developed and implemented.

- Although there are no specific programs for Lyme disease being planned at this time, strategies that should be pursued in the future include prevention through personal protection as well as tick control programs. There will be an ongoing need for education to facilitate early detection and appropriate treatment.

- Improve race/ethnicity data collection and reporting on infections and communicable diseases.

Immunization Levels

- In addition to the statewide initiatives now underway, a future strategy given recent consideration includes establishing an AFDC/immunization clinic site in each county.

FOR FURTHER INFORMATION

1. Andrus, J., deQuadros, C., & Olive, J-M. The surveillance challenge: Final stages of eradication of poliomyelitis in the Americas. MMWR, 41(SS-1), 1992.

2. Certification of poliomyelitis eradication - the Americas 1994. MMWR, 43, 1994.

3. Epidemiology Communicable Disease Control Service. Confinement of persons with tuberculosis. Proposed new rules: N.J.A.C. 8:57-5 (1994). New Jersey Register, 26, 1994.

4. National Vaccine Advisory Committee. White paper. The measles epidemic: the problems, barriers, and recommendations. Journal of the American Medical Association, 266:1547-1552, 1991.

5. Schulze, T., Taylor, C., & Bosler, E. . Lyme disease: A proposed ecological index to assess areas of risk in the northeastern United States. American Journal of Public Health, 81, 1991.

6. Schulze, T., Vasvary, L., & Jordan, R. Lyme disease: assessment and management of vector populations in New Jersey, prepared by Rutgers Cooperative Extension in cooperation with New Jersey Department of Health and Freehold area Health Department. Trenton, NJ: New Jersey Department of Health, 1994.